DATASHEET
FUJITSU CELSIUS W480 WORKSTATIONS

SAY HELLO TO HIGH-END GRAPHICS

The CELSIUS W480 is the advanced workstation for professional environments. Powered by the latest Intel® Processors, it is the ideal choice for business environments such as 3D CAD, financial forecasting and digital content creation. Thanks to the ISV certification process you can be guaranteed that your preferred professional applications will run with maximum speed and system stability.

GOOD PERFORMANCE
Higher productivity
- State-of-the art processors, graphic cards and hard disk drives

ERGONOMICS
Quiet system for a pleasant working environment
- Optimized thermal management, low-noise chassis and silent fans

FLEXIBILITY
Suitable for all application areas
- Excellent flexibility for all tasks

LEADING WORKSTATION APPLICATION CERTIFICATION
Maximum compatibility and performance with customer-preferred applications
- Full support for ISV applications and easy integration into existing IT environments

BUILT TO ORDER
Free configurability for all product lines
- Customer is given a system optimized for his requirements

COMPONENTS

Processor	
Graphics	Graphics on board
PROCESSOR	Intel® Core™ i5 processor i5-670 (2C/4T, 3.46 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5 processor i5-660 (2C/4T, 3.33 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i5 processor i5-650 (2C/4T, 3.20 GHz, 4 MB, Intel® HD Graphics)
	Intel® Core™ i3 processor i3-530 (2C/4T, 2.93 GHz, 4 MB, Intel® HD Graphics)
	Intel® Xeon® processor X3450 (4C/8T, 2.66 GHz, 8 MB)
	Intel® Pentium® processor G6950 (2C/2T, 2.80 GHz, 3 MB, Intel® HD Graphics)
MEMORY MODULES	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM
GRAPHICS ADD ON CARDS (OPTIONAL)	High-end 3D: ATI FirePro™ V7750, 1024 MB, PCIe x16, 2x DP, 1x DVI-I
	Midrange 3D: NVIDIA® Quadro FX 1800, 768 MB, PCIe x16, DL-DVI-I, 2x DP
	Midrange 3D: NVIDIA® Quadro FX 580, 512 MB, PCIe x16, DL-DVI-I, 2x DP
	Entry 3D: NVIDIA® Quadro FX 380, 256 MB, PCIe x16, 2x DL-DVI-I
	Entry 3D: ATI FirePro™ V3700, 256 MB, PCIe x16, 2x DL-DVI-I
	Multi monitor 2D: NVIDIA® Quadro NVS 450, 512 MB, PCIe x1, 4 x DP
	Professional 2D: NVIDIA® Quadro NVS 290, 256 MB, PCIe x16, 2x SL DVI-I
HARD DISK DRIVES (INTERNAL)	SSD SATA, 256 GB, 2.5-inch
	SSD SATA, 128 GB, 2.5-inch
	SATA II, 10000 rpm, 300 GB, 2.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T. business critical
	SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 750 GB, 3.5-inch, S.M.A.R.T. business critical
	SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
	SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 2.5-inch drives will be mounted in the 3.5-inch bays
DRIVES (OPTIONAL)	Blu-ray Disc Triple Writer
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, 3,5-Inch
INTERFACE ADD ON CARDS/COMPONENTS (OPTIONAL)	
	WLAN III, 802.11g/Draft-n (Windows only)
	Parallel Interface
	Gigabit Ethernet PCIe x1
	eSATA Interface
	Dual serial card, PCI, EX-43092
Base unit	CELSIUS W480
MAINBOARD	
Mainboard type	D2917
Formfactor	BTX
Chipset	Intel® 3450
Processor socket	LGA 1156

MAINBOARD	
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3) ECC/non-ECC
Supported capacity RAM (max.)	16 GB
Memory frequency	1333 MHz
Memory notes	In configurations with 4 GB and more the visible memory may be reduced to approximately 3.5 GB or less (for 32-bit operating systems) and configurations with 8 GB the visible memory may be reduced to approximately 7.5 GB or less (depending on system configuration).
LAN	Built-in 10/100/1000 MBit/s Intel® 82578 LM
WLAN	Optional (for Windows only)
Audio codec	Realtek ALC663
Audio features	5.1 surround sound, High Definition audio, Internal speaker supports audio playback
I/O CONTROLLER	
Serial ATA total	6
thereof eSATA	1, optional
SAS RAID support	0, 1, 10, 5
INTERFACES	
Audio: in (rear)	2
Audio: out (rear)	1
Front Audio: in	1
Front Audio: out	1
Internal speakers	1
USB 2.0 total	13
USB front	2
USB rear	8
USB internal	2 + 1
Display Port	1 (depends on processor)
VGA	1 (depends on processor)
DVI	1 or 2, optional (depends on processor)
Serial (RS-232)	1, (9 pin)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1, optional
eSATA	1, optional
DRIVE BAYS	
Drive bays total	8
3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2
SLOTS	
PCI-Express Gen2 x16	1 x (312 mm) full height
PCI-Express Gen2 x4 (mech. x16)	1 x (190 mm) full height
PCI-Express x1	2 x (300 mm) full height
PCI (32-bit / 33 MHz)	3 x (312 mm)
GRAPHICS ON BOARD	
Shared video memory	up to 256 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz /
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz /
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz /

GRAPHICS ON BOARD	
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1680 x 1050 pixel 1920 x 1200 pixel
Graphics notes	Graphics controller integrated in dual-core processors. For quad-core processors graphics card is mandatory. Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size For TFT we recommend using 60Hz
ELECTRICAL VALUES	
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Max. output of power supply	500 W
NOISE FOR STANDARD CONFIGURATION (HDD, ODD, FDD)	
Noise emission	According to ISO9296 (LpAm at bystander position)
Idle mode	tbd
Office mode	tbd dB(A)
Noise notes / description	Actual noise emissions may vary depending on configuration
DIMENSIONS / WEIGHT / ENVIRONMENTAL	
Dimensions (W x D x H)	203 x 426 x 442 mm
Operating position	Vertical / horizontal
Weight	16 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	15 - 35°C
Operating relative humidity	10 - 75 %
COMPLIANCE	
Product	CELSIUS W480
Model	MTB-D2917
Germany	GS optional Blauer Engel / Blue Angel optional
Europe	CE
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) Medical certification IEC60601-1-2 in combination with medical kit ENERGY STAR® 5.0
Compliance notes	Energy Star compliance may vary depending on actual configuration
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx
SECURITY	
Physical security	Kensington Lock support Eye for padlock Seal option Intrusion switch Optional: Integrated cabinet lock
System security	Write protect option for the Flash EPROM Embedded security (TPM 1.2) Disable / Hide TPM option
User security	Hard disk password User and supervisor BIOS password Optional: Access protection via SmartCard reader Optional: SmartCase Logon+

OPERATING SYSTEM	
Operating system optional preinstalled	Microsoft® Windows® 7 Professional 64-bit Microsoft® Windows® 7 Professional 32-bit Microsoft® Windows® 7 Home Premium 64-bit
Operating system compatible	Microsoft® Windows Vista® Business 64-bit Microsoft® Windows Vista® Business 32-bit Microsoft® Windows® XP Professional x64 Edition Microsoft® Windows® XP Professional Linux
Operating system notes	RedHat / Novell certification pending For some configurations third party drivers are currently not available or configuration restrictions may apply.
ADDITIONAL SOFTWARE	
Additional software (optional)	Drivers & Utilities DVD (DUDVD) Windows® 7 & Vista & XP Recovery DVD TwinLoad Windows® XP downgrade pack
Additional software (included as a CD/ DVD)	Norton Internet Security (incl. Firewall)
MANAGEABILITY	
Manageability features	iAMT Intel® Active Manageability Technology v6.0 (not activated, not set up)
Manageability type	DeskView 10
Manageability link	http://ts.fujitsu.com/manageability
INPUT DEVICE / COMPONENTS	
	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse Space Explorer USB Space Navigator USB Space Pilot USB Keyboard
Standard Warranty	
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu CELSIUS W480, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach,Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructureas-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu CELSIUS W480, please contact your Fujitsu sales representative or Fujitsu
Business partner, or visit our website.
http://ts.fujitsu.com/celsius

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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2010-01-05 CE-EN